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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE MEW 087-100/011018 3416 Claude Yonnet 03/27/2002 09/980,431 EXAMINER 07/12/2004 24118 7590 HEAD, JOHNSON & KACHIGIAN KRISHNAMURTHY, RAMESH 228 W 17TH PLACE ART UNIT PAPER NUMBER TULSA, OK 74119

3753

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	<i>V</i>
	09/980,431	YONNET, CLAUDE	
	Examiner	Art Unit	
	Ramesh Krishnamurthy	3753	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period to - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ti y within the statutory minimum of thirty (30) da vill apply and will expire SIX (6) MONTHS fron , cause the application to become ABANDONI	mely filed ys will be considered timely. n the mailing date of this communicati ED (35 U.S.C. § 133).	ion.
Status			
1) Responsive to communication(s) filed on 21 Ju	une 2004.		
	action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims			
4) Claim(s) 1 - 21 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) Claim(s) 15,18 and 20 is/are allowed. 6) Claim(s) 1 - 8,10 - 14, 17, 19 & 21 is/are reject 7) Claim(s) 9 and 16 is/are objected to. 8) Claim(s) are subject to restriction and/o Application Papers 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	wn from consideration. red. r election requirement. er. epted or b) objected to by the drawing(s) be held in abeyance. Settion is required if the drawing(s) is o	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121	
Priority under 35 U.S.C. § 119			
a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the prio application from the International Burear * See the attached detailed Office action for a list	s have been received. s have been received in Applica rity documents have been receiv u (PCT Rule 17.2(a)).	tion No ved in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summar Paper No(s)/Mail I 5) Notice of Informal 6) Other:		

This office action is responsive to communications filed 06/21/2004.

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/21/2004 has been entered.

Claims 1 – 21 are pending.

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1 8 and 10 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art admitted to by the applicant (Figs. 1 4) in view of the document (D1) Automatischer Duerchflussregler, Technische Rundschau, Vol. 62, No. 44, 10/16/70, page 29.

The prior art admitted to by the applicant (Figs. 1 - 4) discloses the invention including a pilot valve (1) controlling a pressure reducing valve (2) with the exception of explicitly disclosing a pilot valve that has a fail safe arrangement and absence of a leaky seal.

The document D1 discloses (Fig. 2) a valve comprising: biasing means to control a gate for controlling fluid flow through a control chamber; a second chamber being

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isolated from fluid communication with said control chamber and with the pressure reducing valve being controlled is sealed by a second chamber diaphragm into which control pressure is applicable for also controlling the operation of the gate, whereby, in use, an increase in control pressure acts to reduce fluid flow through the gate; the control pressure is different from the outlet pressure; and wherein the side of the diaphragm against which the control pressure is not applied, is in fluid communication with the control chamber. The valve in D1 is disclosed as being capable of use with a fluid which here is taken to include water, as well.

It would have been obvious to one of ordinary skill in the art to have substituted the valve in Fig. 2 of D1 for the pilot valve in the prior art admitted to by the applicant, for the purpose of obtaining a fail safe arrangement and absence of a leaky seal, in controlling the pressure reducing valve.

It is noted that the valve in D1 does not explicitly disclose a diaphragm sealing the part of the valve housing including the spring from the control chamber. However, each of the pilot valve arrangements in Figs. 1- 4 in the prior art admitted to by the applicant discloses such a provision. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided such a diaphragm for isolating the spring chamber from the fluid flowing through the pilot valve.

4. Claims 17, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of prior art admitted to by the applicant (Figs. 1 - 4) in view of the document (D1) as applied to claims 1 - 8 and 10 - 14 above, and further in view of Yonnet (US 5,460,196).

In the device according to the combination of prior art admitted to by the applicant (Figs. 1-4) and the document (D1), the inlet pressure to the pilot valve is being used as control pressure.

Yonnet ('196) discloses (Col. 10, lines 27 - 32) that is known in the art to use gas pressure as control pressure since such an arrangement would potentially allow greater flexibility in the range of control pressures to be applied.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided in the combination of prior art admitted to by the applicant (Figs. 1-4) and the document (D1) an arrangement that involves the use of gas pressure as control pressure for the purpose of obtaining greater flexibility in the range of control pressures to be applied, as recognized by Yonnet.

- 5. Claims 15, 18 and 20 are allowed.
- 6. Claim 9 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims rejected herein have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh Krishnamurthy whose telephone number is (703) 305 - 5295. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Scherbel, can be reached on (703) 308 - 1272. The fax phone number for the organization where this application or proceeding is assigned is (703) 872 – 9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 - 0861.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramesh Krishnamurthy, Ph.D., PE

Primary Examiner

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